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MANAGER-ORGANIZATION LINKAGES: THE IMPACT OF CHANGING WORK ENVI--ETC(U)
NOV 79 L W PORTER , H L ANGLE , R M STEERS N00014-76-C-0164
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REPORT DOCUMENTATION PAGE

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1. REPORT NUMBER Technical Report No. 20	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Manager-Organization Linkages: The Impact of Changing Work Environments	5. TYPE OF REPORT & PERIOD COVERED	
7. AUTHOR(s) Lyman W. Porter, and Harold L. Angle, Richard M. /Student Richard T. /Mentor	6. PERFORMING ORG. REPORT NUMBER	
9. PERFORMING ORGANIZATION NAME AND ADDRESS Graduate School of Administration University of California, Irvine Irvine, CA 92664	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS NR 170-812	
11. CONTROLLING OFFICE NAME AND ADDRESS Organizational Effectiveness Research Office of Naval Research	12. REPORT DATE November 1979	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)	13. NUMBER OF PAGES 35 pages	
	15. SECURITY CLASS. (of this report) Unclassified	
16. DISTRIBUTION STATEMENT (of this Report) Distribution of this document is unlimited. Reproduction in whole or in part is permitted for any purpose of the United States Government.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Management Ego-identification Organization Loyalty Work Environment Organizational commitment Membership continuance Organizational change		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The work environment faced by the modern manager is multi-faceted, having at a minimum socio-normative, economic and technological aspects. Through analysis of current trends toward change in the nature of this complex environment, it appears feasible to build a scenario for the last quarter of the 20th century. A potentially critical problem that will face organizations during that quarter-century will be that of gaining and maintaining sufficiently sturdy linkages of managers to their organizations. Several predictable changes in the work environment will tend to undermine what are now believed to be the antecedents to organizational attach-		

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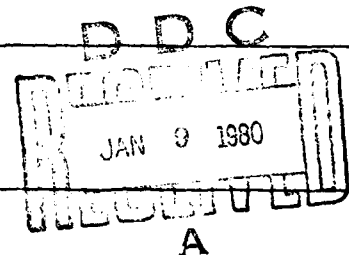
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MANAGER-ORGANIZATION LINKAGES:
THE IMPACT OF CHANGING WORK ENVIRONMENTS

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Technical Report No. 20

November 1979

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Prepared under ONR Contract N00014-76-C-0164

NR 170-812

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Paper prepared for the "NATO International Conference on
Changes in the Nature and Quality of Working Life,"
Thessaloniki, Greece, August, 1979

Manager-Organization Linkages: The impact of changing work environments.

Abstract

The work environment faced by the modern manager is multi-faceted, having at a minimum socio-normative, economic and technological aspects. Through analysis of current trends toward change in the nature of this complex environment, it appears feasible to build a scenario for the last quarter of the 20th century. A potentially critical problem that will face organizations during that quarter-century will be that of gaining and maintaining sufficiently sturdy linkages of managers to their organizations. Several predictable changes in the work environment will tend to undermine what are now believed to be the antecedents to organizational attachment. This paper discusses the forces that appear to bind managers psychologically to their organizations, in the context of projected environmental changes, and develops a set of propositions that could guide organizational action and research dealing with these issues.

MANAGER-ORGANIZATION LINKAGES:

THE IMPACT OF CHANGING WORK ENVIRONMENTS

Today, we live in an organizational society. Most of us, in industrialized nations, spend the bulk of our active lives in organizations. The individual entering a work organization soon establishes a quasi-stable relationship with the larger system, in which individual and organization agree, tacitly or explicitly, to exchange something of value with one another, as part and parcel of a continuing association. Each makes demands on the other and offers resources in response to the other's demands (Porter, Lawler & Hackman, 1975). The psychological contract (Levinson, Price, Munden, Mandl & Soley, 1962) "drawn up" between the parties includes appropriate economic "clauses" -- as the ostensible basis for work-organization membership is economic -- but (as the term implies) there are psychological aspects to the exchange, as well.

A central psychological issue in the "contract" is that of member attachment to the organization. This bond has been studied under a number of frameworks such as loyalty, identification, ego-involvement, and organizational commitment. At this point, rather than splitting hairs over nuances of meaning, let us speak, more generically, about "individual-organizational linkages." (Later on, the focus will narrow to "manager-organization linkages.")

The bond between an employee and the work organization can be thought of as involving two broad categories; from the perspective of the individual: (1) joining and retaining membership in the organization; and (2) becoming psychologically attached to the organization (Porter & Dubin, 1975). The former aspect implies security for the individual and stability for the

organization; the latter has perhaps more significant implications, both for the individual and for the organization.

Early socialization processes teach children group identifications that go beyond the immediate family (Katz & Kahn, 1978). Children are taught the social value of loyal participation in whatever social institutions and organizations are valued by parents and other socializing agencies. This early training "...furnishes some of the bedrock of later organizational identification...The reference to the company as a family, for example, has become a management cliché" (Katz & Kahn, 1978, p. 377). The implications of the organization as a surrogate family are not trivial. One's membership in a work organization may provide the basis for the same sort of psychological need fulfillment provided by earlier membership in such primary social groups as the parental family -- fulfillment of needs related to such basic aspects of psychological structure as the self-concept. A number of scholars (e.g. Levinson, 1965; Selznick, 1957) have portrayed organizations as becoming invested with this sort of psychological meaning for their members.

The concept of deep psychological self-investment on the part of members has equally important implications from the organization's perspective. While some personnel turnover is no doubt healthful for nearly any organization (i.e., turnover is a necessary component of renewal), the organization has to avoid unnecessary personnel turbulence. Members must, in general, be induced to join and remain.

Once in the organization, some motivational basis must exist for the performance of necessary behaviors. These include not only the behaviors that meet explicit role prescriptions, but also (at least for some organizational

members) spontaneous and innovative behaviors that transcend role prescriptions (Katz, 1964). At least ideally, routine work behaviors are part and parcel of the economic exchange that takes place between organizations and their members. Spontaneity and innovation, however, may be another matter. While it is certainly possible to establish contingent reward systems that reinforce innovation, this presents even greater difficulties than does the contingent reinforcement of routine task performance. Some alternative motivational basis would be useful. One such alternative might lie in the psychological attachment of the individual to the organization.

Whether this attachment is viewed in terms of organization commitment as defined by Porter and his colleagues (Porter, Steers, Mowday & Boulian, 1974) or Buchanan (1974), or in terms of identification as conceived by Hall and Schneider (1972), Ingham (1970) or Patchen (1970), at least one aspect of attachment seems to be an internalization of the organization's (perceived) goals. Thus, the individual need not be goaded or cajoled to perform discretionary behaviors on behalf of the organization. Such behaviors are, in a way, their own reward. In acting in the organization's interests, the individual is automatically pursuing his/her self-interests, as well. To the extent that one's linkage to the organization becomes an expression of the ego or its central values, organizational activity can become self-rewarding (Katz & Kahn, 1978).

The foregoing is not intended as a preamble to an assertion that high levels of attachment are necessary (or even desirable) for all organizational members. On the contrary, organizations are, by their nature, systems of role differentiation. In most utilitarian organizations (Etzioni, 1975),

there are many roles for which adequate role behavior need not involve deep self-investment. Such roles are found, for the most part, however, at relatively low organizational levels.

It is in the managerial ranks that Katz's (1964) requirement for spontaneity and innovation can become critical for the organization. Effective management (especially at the higher levels) is proactive -- at least part of the manager's role involves the search for new problems and for opportunities to exploit (Thompson, 1962), as well as the performance of "nonprogrammed" activities (March & Simon, 1958). Hence, we propose that the issue of attachment to the organization is particularly salient at managerial levels.

Allowing, for the moment, the assertion that strong attachment to the organization is most necessary at the managerial level, it may also be the case that development of such linkages may also be more likely at managerial, rather than lower, levels. Mayntz (1970) held that the vertical differentiation in organizations makes it "...rather difficult at least for lower participants to develop full identification on the basis of normative commitment to the organizational goal" (p. 374). It is, by contrast the higher organization levels where "inclusion" (i.e., movement toward the inner circle or core of the organization) (Schein, 1978) becomes more likely, which provides at least a basis for the process of identification. Buchanan (1974) found "personal significance reinforcement" to be a key ingredient in the organizational commitment of managers in both business and government settings. In effect, those who are "in the know," and in a position to influence organizational outcomes by virtue of their position in the organization (to wit: the managers), are the ones most likely to become ego-involved in that

organization.

Thus far, we have attempted to make a case for organizational attachment as a sufficient condition for motivating organizationally-beneficial discretionary behaviors on the part of managers. We are less sanguine with respect to attachment as a necessary condition for such motivation. It is not difficult to name other possible routes to high performance levels, including: intrinsic motivation or job involvement; personal normative beliefs akin to the Protestant work ethic; internalization of the values of a craft or profession; or commitment to an occupation or career. Some of these alternatives will be considered further, later on. For the present, however, the discussion will focus on manager-organization linkages, per se, and the influence of work environments (and changes in work environments) on these linkages. Our review of the literature dealing with attachment, organizational commitment and similar concepts, suggests the existence of three rather distinct kinds of linkages:

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|--|---|
| Link 1: <u>Membership Continuance:</u> | the desire to retain organizational membership |
| Link 2: <u>Ego-Identification:</u> | self-perception in terms of organizational membership |
| Link 3: <u>Loyalty:</u> | Allegiance: placing organization above all competing interests (including self interests) |

For the purposes of this paper, we will be considering environmental impacts on those three manager-organization links. This discussion begins with an exposition of the multiple environments inhabited by today's manager, and an

extrapolation of some current trends in order to project how those environments might change over the next quarter-century.

CHANGING WORK ENVIRONMENTS

Work environments are generally acknowledged to exert powerful influence on the behavior of organizational members -- managers being no exception. The interactionist perspective in psychology gives the environment co-equal billing with the individual in the determination of behavior (cf. Lewin, 1935). "The" environment, however, would imply a gross oversimplification of reality. Work environments can be, and have been, conceptualized as consisting of any number of more-or-less independent dimensions, including the physical, structural, procedural, technological, interpersonal and task characteristics of the work situation. Elsewhere in this forum, Professor Cherns characterizes the work environment as divisible into its physical, economic, political, social, and cultural aspects. In a very similar vein, Professor Davis talks of the social, economic, technological, political and demographic environments of organizations.

Our discussion of work environments will take a similar tack, by differentiating "the" work environment, rather arbitrarily, into three dimensions: the socio-normative, economic, and technological environments. While this three-way taxonomy may be at a somewhat higher level of abstraction than many of the more elaborated breakdowns, we believe that parsimony and space limitations dictate such an approach for our present purpose, which is not an analysis of work environments, per se, but an attempt to assess the impact

of the environment on manager-organization linkages.

An attempt will be made, however, to subsume the important categories that might comprise a more differentiated listing under one or another of our three "environments" (although it may soon become apparent that certain such categories may not fit neatly -- or exclusively -- into one of the three).

In the remainder of this section, several prevalent societal trends will be discussed under each of the three major headings (viz. socio-normative, economic, technological). The discussion will be focused specifically on those apparent trends which, we believe, (at least in the United States) have the most relevance for the shape of organizational life in the immediate future, and hence for the nature of the linkages between managers and their organizations.

In so doing, however, we remain aware that "futurism" is an inexact science, and that, as Davis has put it elsewhere in this conference, the lessons of the outgoing era may be less than helpful -- even misleading -- in attempting to cope with the future. Therefore, we shall try to limit the discussion to a few of the ongoing changes in work environments that appear to be leading toward the most predictable trends in manager-organization relationships.

The Socio-Normative Environment. Perhaps the most influential facet of the work environment on managers' organizational attachment is that related to the social cues regarding which behaviors are "correct." Organizational socialization is largely a process of peer influence (VanMaanen, 1975), and all members (managers included) undergo a developmental process, over the lifespan, in which early-acquired cultural and subcultural norms are

fused with later experiences (in such settings as work organizations) to result in an organized system of normative beliefs. Accordingly, societal norms will influence the manager in two ways: directly, in terms of the normative beliefs brought to the organization as a result of primary socialization; and indirectly, through exposure to the normative beliefs that others bring to the organization. The latter is a particularly salient aspect of the manager's immediate work environment. The ambiguities in organizational life quite frequently force the manager to depend on collective others, in order to answer "ought to" questions (cf. Festinger, 1954).

Of all aspects of the socio-normative work environment, few have received more attention, of late, than what is commonly referred to as the "changing work ethic." While some would assert that the existence of such an ethic has always been illusory, i.e., more a matter of "received doctrine" (Barrett, 1972, p. 9) than one of evidence, few would dispute that the decade of the 1960's saw a strong movement away from whatever the "base rate" Protestant Ethic might have been. Wholesale rejection, on the part of youth, of their elders' assumed preoccupation with status, achievement, acquisition of material wealth and consumption precipitated a revolutionary reversion toward pre-industrial lifestyles. The theme "tune in, turn on and drop out" characterized a vocal segment of the youth subculture, engaged in seeking noninvolvement with work as their parents and grandparents had known it.

Ironically, a case can be made that a prime antecedent of the "flight from achievement" might have been the unprecedented level of affluence that had been the fruit of the labors of earlier generations. Clark Kerr has alluded to a paradoxical chain of events whereby hard work leads to

affluence, but affluence, in turn, leads to erosion of the work ethic.

Closely related to the unprecedented affluence experienced during the past several years has been an explosion in formal education (although some would hold that quality has not always kept pace with quantity). The implications for organizations are considerable. In the mid-sixties Bennis (1966) prophesied that the gap in formal education between the top and bottom echelons in organizations would shrink. This has been borne out, at least in the United States, by data from the periodic Quality of Employment Survey (Quinn & Staines, 1979), which has shown a steady increase in worker education levels during the period 1969 to 1977.

Increased education levels can be expected to impact the managerial ranks, as well as the lower strata of organizations. While this might result in fledgling managers' arrival at their first organization better equipped technically to manage, as well as more firmly grounded in world knowledge than were their predecessors of a generation or so, these neophytes can also be expected to have higher levels of aspiration. Education brings with it, not only an elevated perspective on what's acceptable in terms of one's inputs and outcomes (cf. Adams, 1965) in the employment exchange, but a fuller awareness of alternatives, as well -- in effect, a raised "comparison level for alternatives" (Thibaut & Kelley, 1959).

Also concomitant with generally rising education levels appears to be increasing societal mistrust of authority and of large authoritative institutions, such as big business or big government. Large corporations, in turn, have responded to the public mood by expanding the organizational goal structure to include a new major category: "corporate social responsibility"

(Walters, 1977). Abstract notions of duty to society are, in turn, more difficult to operationalize than some of the more concrete indicators of organizational performance such as market share, or return on investment. Hence, inclusion of social-responsibility objectives in corporate goal structures might have the unintended consequence of increasing goal ambiguity for organizations. This, in turn, would make it more difficult for the individual manager to identify his/her personal contribution toward accomplishment of significant (and specific) organizational outcomes.

Some corporate actions aimed at fulfilling societal duties may be as much the result of legal constraints as they are a voluntary response to the public mood. At least in the United States, organizations of all types are coming under increasing pressure to redress past inequities in which certain racial or ethnic groups (and women) ostensibly had been denied equal employment opportunity. Under the rubric of "affirmative action," organizations have seen an infusion of these formerly disadvantaged groups -- and, since the largest imbalances originally existed at the managerial level, it can be expected that the greatest affirmative action impact will eventually be in the management ranks.

While the underlying social motives behind the affirmative action movement seem unimpeachable, here too may lie a serious unanticipated consequence. Buchanan (1974) contrasted business and government organizations, by citing the ethnocentric nature of the former in contrast to the more pluralist governmental organization. Buchanan alleged that "In industry, discrimination and favoritism are employed as team-building devices. Management groups as

a result have similar characteristics, which fosters unanimity on policy and general harmony in organizational operations" (p. 345). This aspect of government-business contrast that Buchanan saw in 1974 may be a vanishing phenomenon.

One major feature of the "new corporate pluralism" (at least, in the United States) has been a dramatic rise in the number of women in the workforce -- and again this trend has been particularly strong at the managerial level. If not a contributing factor, this has been at least consistent with a larger societal trend away from sex-role differentiation. Thus, traditional norms whereby males' locus of identification was related to occupation while females' primary status anchor was the home, may increasingly be subject to question.

Another outcome of the infusion of women into management seems, inevitably, to be an increase in the number of dual-career families (Hall & Hall, 1978; Schein, 1978). This, in turn, has economic ramifications. Discussion of these implications, however, will be held in abeyance until the ensuing section on the economic environment.

As a final point, an apparent societal trend, which seems to have several potential impacts on the nature of managers' linkages to their organizations, revolves around attitudes towards permanency and change, per se. We live in what has been termed a "temporary society" (Bennis & Slater, 1968). In some quarters, change, itself, appears to have positive value. Social contracts (from marriage to employment), that might once have been imbued with a sense of permanency, seem increasingly to be subject to continual re-evaluation.

In some industries, executive "headhunters" recurringly approach organizational managers, making salient the idea that one's skills may be both transferrable and highly marketable. At least one popular guide to management careers advises that the sensible manager should always be planning for the next job change (Bolles, 1972).

In some occupations there has been an expansion, into the managerial ranks, of temporary-hire or "contracted" employment. This mode of employment appears to range from the provision of ad hoc accounting teams to the temporary assignment of top management, per se. The latter phenomenon was encountered recently, in a study of mass transit organizations in the Western United States (Perry, Angle & Pittel, 1979). Thus, some managers never "join" the organization in the traditional sense.

Another aspect of temporariness seems to reside in the currently popular notion of the "midcareer crisis" (Schein, 1978). Executives appear, in increasing numbers, to be facing existential dilemmas once thought to be the exclusive property of youth. It has even been suggested that mid-career sabbaticals might be offered, in which the employing organization may subsidize some type of formal education (Beckhard, 1977).

Other trends appear to militate toward partial- rather than full-inclusion (Allport, 1933) in the workrole. One such trend is that toward more part-time employment. A more radical evolution is the concept of job sharing. At least one employer, the State of California, has adopted a hiring plan whereby pairs of employees are hired for a single job. For each prescribed work period, one of the two job incumbents is to report for work. This system is reputed to be finding wide appeal among married couples who share

child-rearing duties -- further indication of a changing socio-normative environment.

The Economic Environment. The preceding section noted a trend toward dual careers, i.e. husband and wife both immersed in full-time employment. The economic impact of this trend may be considerable. In the first place, the diffusion of breadwinner responsibility between the two marital partners reduces economic dependence, in the sense that neither job is as essential to economic security as it would be if it were the only job. With neither partner totally dependent on his or her employing organization, the economic linkages of both to their respective organizations might be weakened considerably.

On the other hand, once the family has accommodated to a double income, there may be some reluctance to give up either source of earnings. Hence, the "zone of indifference" (Barnard, 1938) may be narrowed with respect to which orders of the organization will be obeyed. If, for instance, the organization wants one marital partner to re-locate to another city, the move might be resisted or refused, on the basis that the other partner's job would have to be forfeited.

Increasing levels of affluence are only partly, of course, the result of multiple sources of income within families. Personal income is higher currently than ever before in history for sole breadwinners as well as for dual-income family units. In combination with the graduated income tax, which seems to be a fact of life in most (all?) Western nations, the marginal utility of money may be severely diminished. Accordingly, the organization may find the use of economic inducements to be less and less

effective.

At the same time that economic growth has had the paradoxical effect of loosening the economic ties of manager-to-organization, increases in discretionary income have enabled managers to become more involved than ever before in leisure activity. Additionally, projected innovations in time scheduling of work such as flexitime, the 4-day, 40-hour workweek, and even the 25-to-32-hour workweek advocated by some labor interests, could eventually spill over into management work schedules, as well. With the workrole occupying a decreasing proportion of the manager's life space, there could be some decrement in the extent to which his/her relationship to the work organization assumes personal importance.

The Technological Environment. The most salient feature of the technological work environment is rapid change. The evolution of some technological systems, such as computers, has been occurring at a near-exponential rate. This fantastic rate of advance renders all but the most circumspect prediction a very hazardous undertaking. (The field is littered with the remains of bold forecasts of twenty years ago, or so, regarding the nature of management in the 1980's time frame). Nonetheless, there are a few recent trends, for which there is no apparent reason to foresee a reversal, and which appear to have strong implications for manager-organization linkages.

One rather obvious aspect is the rapidity, per se, of technological change. The furious pace of innovation presages an ever shortening cycle of knowledge obsolescence (Hall, 1976). In contrast to an earlier age, in which a trade or craft could be handed down for generations, it is not inconceivable that occupations can now come into existence, flourish and

become obsolete, all within the career span of a single person. Thus, an individual's usefulness to a particular organization might be transitory, unless the organization were to develop an affirmative policy of re-cycling members by retraining.

Aggravating the problem of technological obsolescence has been an information explosion. A comparison of the number of published pages in one's own area of expertise, during the past year, with a like publication period, say twenty years ago, is an eye-opening experience. Our ability to transmit, process, print and store information is rapidly outstripping the capabilities of the human information processor. In organizations, the outcome of all this is a powerful force toward increasing differentiation. The general-purpose manager may be a dying breed, because no single person can assimilate enough knowledge to "do it all" (Schein, 1978).

The decline of the generalist, and the attendant rise of the specialist, should exert a considerable force toward professionalization. A segmentation of management knowledge, necessitated by human limitations, might be the critical antecedent to creation of the rest of the occupational characteristics that have come to be associated with the professions (cf. Ritzer, 1977). One of the more agreed-upon attributes of the professions, of course, is a "cosmopolitan" rather than a "local" orientation (Gouldner, 1957).

While cosmopolitanism is fostered by a professional work orientation, it is also facilitated by technical systems that permit easy exchange of information with distant peers. Attendance at a conference such as this one would have been a major undertaking, in an earlier age, for a participant from the United States (or Australia). The relative ease of air travel, along with

the near-instantaneous electronic communication that is at least technically possible between almost any two persons on Earth, facilitates peer interaction with persons far removed from one's own organization. In combination with current media programming, such electronic aids provide today's manager with an unprecedented array of information on alternatives -- both with respect to viewpoints on issues and with respect to his/her occupational options.

These considerations, in the aggregate, carry implications both for the likelihood that managers will develop strong attachments to their organizations, and for the consequences -- for managers, organizations, and society at large -- should such attachments fail to occur. These will now be discussed,

IMPACT OF CHANGING WORK ENVIRONMENTS ON MANAGER-ORGANIZATION LINKAGES

Combined Impact: Weakened Linkages.

As strongly implied in our discussion of environmental trends, there seems to be one clear conclusion regarding the collective effect of those trends on the linkages of managers to their respective organizations: the linkages will be significantly weakened or reduced. This is not to say that each environmental trend will have an equivalent impact, or that any given trend will affect all types of linkages. Rather, our fundamental thesis is simply that there is an unmistakable and probably irreversible effect: weakened linkages.

We see membership continuance being affected by trends in each of the three environmental areas (socio-normative, economic, and technological). To the extent that: (1) individuals are less convinced than before that work is "good" in its own right; (2) societal norms look more positively on temporary or transient relationships; and (3) increasing educational levels

predispose managers to re-evaluate their career lives, then it would seem to follow that the strength of their desire to remain with a particular organization will be weakened. Likewise, increasing economic affluence makes it more possible for the manager to consider leaving an organization without suffering undue financial disadvantage. And, if managers are more prone to consider the possibility of leaving their present organization because of some of the reasons listed above, then technological advances in communication and transportation tremendously facilitate the ability to learn more about other organizational alternatives, which in turn makes it easier to think about leaving (following through on "the other organization's grass is greener" syndrome).

Ego-identification, in which the manager tends to see the expression of his/her talents and capabilities in terms of his/her organizational membership, will likely be weakened by such trends as: the tendency of more people in society to re-evaluate their careers; the tendency toward a more relaxed view of temporary relationships; and the more pluralistic nature of the managerial workforce ("there are not a lot of people here I closely identify with"). In the economic sphere, the increased emphasis on leisure provides other, often very appealing, areas of life with which the manager can identify. In contrast with the past, there are many more non-work opportunities for the person to say "that role is also me." Technological trends, especially the possibility of early obsolescence of whatever skills or knowledge the manager had at the time he/she started with the organization and the necessity to become increasingly specialized because of the knowledge explosion, also make it harder and harder for the manager to maintain an ego-identification

with any given organization.

Multiple trends also serve to reduce the tendency toward loyalty and placing the value of serving the organization above all else. The manager will be less likely to feel that "my organization is the best of all possible organizations" or that "I owe my organization (as opposed to family, profession and the like) a special obligation," to the extent that: (1) ready opportunities exist for the manager to serve in other organization; (2) economic factors such as general affluence allow the luxury of considering other employment options; (3) the existence of dual-career families permit (or encourage) a focus on more than one organization; and (4) technological advances confront the manager with considerable information about other organizations, or facilitate contact with professional peers from other organizations.

To reiterate: Each of the three major types of linkages -- membership, ego-identification, and loyalty -- are and will continue to be affected by a number of the trends we have been discussing. We have highlighted what we think are some of the particular areas where the impacts will be strongest in the direction of weakening the links. We have not pointed to any areas where the environmental trends will be likely to strengthen links because we view the trends as having an almost totally one-way effect. If this analysis is correct, then there will be a number of implications for managers, organizations, and society.

Implications for Managers

At first glance, it might appear that reduced linkages would only help managers and harm organizations. That is not necessarily the case, for either managers or organizations. With respect to managers as employees of organizations, reduced linkages will provide a kind of "freedom" that will make it easier both physically and psychologically to "leave" organizations. As the preceding discussion indicated, a number of trends combine to increase the ease with which a person can change actual membership in organizations, and also ease any feelings of "guilt" about transferring loyalties from one organization to another. After all, if one considers oneself as a true "professional," then the work is valuable regardless of location. The environmental trends, then, would seem broadly to favor the manager at the expense of a particular organization.

However, there is another side to the manager's coin that ought not to be overlooked. First, it is not obviously clear that high performance capabilities can be transferred easily from one organization to another. Just because an individual was highly successful in a particular organizational setting -- thereby being sought after by other organizations -- does not guarantee similar success in the next organization. (See the example of American professional baseball or football players.) Even if the manager acts and thinks like a professional and thus is more bound to a specialized area of competence than to an employing organization, it is likely that particular organizational environments may have considerable effects on the tangible enactment of the professional performance. Therefore, while the transfer possibilities are greatly aided and abetted by environmental trends, the

transplant may not take hold in the new surroundings. Second, quite aside from how successfully managers can move their performances from one organization to another or reduce their investment in an organization even without moving to a new one, there is the question of how easy it will be to cope with the potentially reduced sense of identification with an organization and a concomitantly reduced sense of continuity and stability. For those who transfer their specialized skills to another organization, this potential problem may not be too great if they are able to retain a focus on the professional skill rather than on their organizational "homes." For those who stay with a given organization but decide to invest less of themselves in it, the problems may be greater. As Levinson (1965) has stressed, individuals have a need to have an attachment to something. It may not always be easy for some managers to substitute other "somethings" for the work organization, and thus reduced organizational linkages could have some degree of adverse impact on their psychological well being. (We would expect, of course, considerable individual differences in this regard.)

Implications for Organizations

Reduced manager linkages to organizations would seem to have especially critical implications for organizations. To examine briefly some of the more important ones, we might ask a series of questions:

(1) Is it necessary for a minimum number of key managers to be strongly linked to the organization? Earlier we stated the assumption that from the organization's perspective it is not necessary that all or even most employees be strongly linked to the organization. Regardless, a crucial issue is whether some sort of "critical mass" of strongly linked managers must

exist in any organization. If the trends are in the direction of reducing linkages, and if it is necessary for some minimum percentage of managers in any organization to be linked with strong bonds, then what steps does the organization take to insure that enough managers will be so linked?

(2) Where are the strongest managerial linkages needed in the organization? Following on the previous question, if it is assumed that it is necessary that at least some portion of the managerial workforce be strongly linked to the particular organization, then the organization will need to determine where these locations are that require this kind of organizational involvement of specific managers. This, in effect, raises the notion of the differentiated organization: strong linkages are not needed throughout, but they are needed at certain places. An obvious answer to the question of "where?" is to say "at the top," since it is here that key policy decisions that have the broadest impact are made. If it is agreed that "the top" is one place, are there any other places that require strong linkages, or is it enough that only those at the very highest levels are, and feel themselves to be, firmly attached? We would suggest that for many organizations the top level is probably not the only location where strong linkages are needed, and that therefore if an organization lets all other linkages decrease or attenuate serious repercussions may result for organizational effectiveness and survival. This leads to the next basic question:

(3) Is it possible to have a highly productive organization with only a moderate to low average level of managerial linkages? One answer may be that technology can largely substitute for high levels of organizational commitment or loyalty. While this seems clearly to be the case in many

"shop floor" production situations, it may not be so clear that technology is an equivalent substitute for such commitment at managerial levels. Another type of answer could evolve around the extensive and effective use of extrinsic incentives (combined with the manager's intrinsic motivation in the work itself and a commitment to professional standards). Application of extrinsic incentives in such a way as to substitute for the type of performance and continuance behavior that is generated by strong linkages is certainly possible in theory (and being demonstrated in many specific organizational circumstances today), but is not always easy in practice. It requires constant attention to the type, amount, and scheduling of such incentives and is prone to severe miscalculations on the part of those who devise and administer extrinsic incentive programs. How usefully extrinsic incentives can replace strong organizational linkages raises a related issue:

(4) Where will extra-role behavior (e.g., innovations that help the organization; proactive behavior that protects or advances the organization) come from, if linkages are weak? The trend for managers to be more "professional" may be part of the answer, as a devotion to professional standards may bring about certain types of behavior that serve the organization as well as the profession. However, such cosmopolitanism by its very nature does not guarantee extra-role behaviors on behalf of the specific organization. Indeed, attention is often diverted to the needs of satisfying the profession, and especially one's peers in the profession, rather than the needs of the organization (which, while not necessarily opposite those of the profession, may often be quite independent of it). In any event, while it seems likely that reduced linkages would not greatly affect the bulk of routine managerial

work, those acts and behaviors that involve unique service to the organization may well become a casualty unless other measures can be substituted. It would appear that such substitution is not an easy task for the organization.

(5) What is the impact on non-management employees if managers do not appear to be strongly linked to the organization? Since behavior by example appears to have such pronounced impacts on the behavior of individuals generally, and especially on lower-level employees in organizations, any tendency for the linkages of higher-level managers to appear weak could negatively affect those working at the operative levels. This would be the "If the boss doesn't care about the organization, why should I care?" type of phenomenon. The issue, then, is that reduced managerial linkages may have direct effects on the performance of managers and also wider indirect, but important, contagion effects on other employees.

The above issues do not constitute an exhaustive list, but they suggest some of the kinds of implications that reduced managerial linkages may have for the organization. In toto, the implications would appear to be a matter of concern if looked at strictly from the organization's vantage point.

Implications for Society

If managers in the future tend to become less strongly linked to whatever organizations they happen to be working for at a particular time, the most important implication for society would arise if the basic fabric of society is changed in any non-trivial way. Does society need or require a certain level of commitment to work organizations on the part of those who lead and manage them? Or, is society better served by having its members enjoy multiple commitments to a wide variety of institutions? On the one hand, society may

well gain by a reduction in the amount of over-zealous behavior (a decline in "true believers") on the part of those who lead any type of organization, whether a work organization, a religious organization, or a political party. On the other hand, multiple, diverse, but shallow, linkages to organizations may present some collective problems. Since one major area of society is composed of work organizations, the probable impact for society of reduced managerial linkages to those organizations would depend on whether such reductions affect, or do not affect, organizational productivity. If the answer is in the negative -- that there is little or no effect on the productivity of work organizations -- then society can largely ignore the issue. If the answer is affirmative, then there may be some cause for concern.

REDUCED MANAGER-ORGANIZATIONAL LINKAGES:

SOME BEHAVIORAL CONSEQUENCES

Thus far, it has been argued that the prevalent trends in managers' work environments will have the net effect of reducing the strength of manager-organization linkages, and that this will, in turn, have impacts on the managers themselves, on their organizations, and on society as a whole. In the present section, the discussion will narrow, somewhat, to consider, in detail, the ultimate effects on organizations of this generalized weakening of manager-organization bonds. Figure 1 presents a simple model which depicts trends in work environments (i.e., a combination of socio-normative, economic, and technological aspects) as an exogenous influence, attenuating manager-organization linkages.

Insert Figure 1 about here

PROPOSITION 1:

In the last quarter of the Twentieth Century, trends in work environments will reduce the strength of manager-organizational linkages.

PROPOSITION 1.1:

Managers' membership continuance linkage to their organizations will be reduced. This will result in search behavior to locate alternatives to their organizational membership, and an increased amount of time devoted to comparison of alternatives.

PROPOSITION 1.2:

Managers' ego-identification in work-related matters (including the organization) will decrease, relative to increased identification with non-work entities (leisure time roles, etc.).

PROPOSITION 1.3:

Managers will begin, increasingly, to specialize. This will result in professionalization of management, along with a concomitant cosmopolitan orientation, which will serve to attenuate loyalty to a given organization, per se.

The weakening of manager-organizational linkages will have impacts, in turn, on certain manager behaviors. The polarized arrows in Figure 1 show only the most significant expected impacts. These generalizations are not offered, of course, as universal hypotheses, of the type "if A then B." Rather, they are presumed to be statistical relationships ("the more A, the more probable B") (cf. Blau, 1970). In addition, the predictions are all formulated on a *ceteris paribus* basis.

PROPOSITION 2:

Attenuation of manager-organization linkages will have consequences for managers' behavioral propensities.

PROPOSITION 2.1:

Managers will change organizations relatively more frequently than they have, historically.

PROPOSITION 2.2:

Managers will tend to exert less effort toward accomplishment of their work role prescriptions, and will engage in fewer innovative and spontaneous behaviors on behalf of a particular organization.

PROPOSITION 2.3:

Managers will tend to comply less fully with the norms of the organization. Organizational norms will have force primarily to the extent that they correspond to internalized societal/professional norms,

PROPOSITION 2.4:

Fewer cases of extreme (i.e., dysfunctional) loyalty to organizations will exist. This will facilitate divergent thinking and enhance managerial flexibility (except to the extent that substitute loci of loyalty, such as the profession, encourages "one best way" thinking).

In addition to responding to direct environmental pressures, organizations can be expected to react to the indirect effects of work environment changes that are manifest through managers' behaviors. Organizational efforts toward adaptation to the consequences of reduced manager-organization linkages might

take two general forms: (1) attempts to shore up the linkages themselves; and/or (2) attempts to minimize the organizational impacts of linkage attenuation.

PROPOSITION 3:

Trends in work environments will have a dual impact on organizations: (1) via their impacts on relevant manager behaviors; and (2) directly. These impacts will engender organizational attempts to adapt.

One possible mode of adaptation would be to try to provide a broader spectrum of professional opportunities for the manager, within the organizational framework. Recent growth trends and the prevalence of diversification and organizational mergers, may have increased this tactic's feasibility for many organizations.

PROPOSITION 3.1:

The more that organizations provide in-house opportunity for variety in experiences, career progression, and professional growth for managers, the less managers will search for alternatives to organizational membership. Consequently, manager turnover will be reduced.

Organizations might attempt to take into account the rising education level and concomitant level of aspiration of the new generation of managers. Accordingly, they may be able to provide a more realistic match between manager and job, by means including, but not limited to, realistic recruiting and placement.

PROPOSITION 3.2:

The more that organizations match managers' jobs to their aspirations and expectations, the stronger the manager's membership continuance link to the organization.

Another way the organization might attempt to bolster manager-organization linkages could be to increase the amount of the manager's life space occupied by the organization, thus crowding out competing loci of attachment. This is typical, for instance, of Japanese industry, which tends to become involved in all aspects of employees' lives. Recent efforts to export Japanese neo-paternalism to the United States have appeared relatively successful (Johnson & Ouchi, 1974).

PROPOSITION 3.3:

The more that organizations occupy non-work aspects of managers' life space, the less the opportunity for the managers to become ego-involved with, or develop loyalties to, competing institutions; hence, the stronger the manager-organization linkages.

The dual-loyalty literature is relatively consistent in the view that loyalty to both profession and organization is facilitated when the organization avoids placing the member in a role-conflict situation (i.e. between organizational and professional roles) (e.g., Thornton, 1970).

PROPOSITION 3.4:

The more that organizations align their norms and expectations regarding managerial behavior with professional norms, the less will be the role conflict. Assuming that such professional norms encourage high levels of performance, managers will tend to exert

high levels of effort and to emit extra-role behaviors toward organizational purposes.

Finally, it may be possible for organizations to lessen the impact of higher manager-turnover rates by planning and organizing for relatively limited-term managerial tenure.

PROPOSITION 3.5:

The more that organizations adapt to high manager turnover by such means as explicit, limited-term contract arrangements with managers, the lower the negative organizational impact of manager turnover.

The final proposition is the only one not formulated at a micro level. However, there are a number of other macro or organizational ramifications of the micro-behavioral outcomes in Figure 1. Rather than listing another set of propositions, we simply provide a set of polarized arrows that indicate where the most pronounced organizational effects should occur.

Concluding Observations

Throughout this paper we have emphasized one basic point. A combination of trends occurring in most of industrialized society is resulting in a reduced bond or linkage between managers and their work organizations. We have further stated that, if our basic premise is true, then there is likely to be a set of important repercussions for organizations, for managers, and for society at large. While we have attempted to spell out what some of these impacts might be, we want to make it clear that we have not passed judgment on whether the consequences for these three societal elements are "good" or "bad." That is the kind of normative assessment best left to each organization, each manager, and to society's institutions.

Regardless of how positively or negatively any particular group or individual views the likelihood of weakening linkages between managers and their organizations, there are probably responses available to organizations that would be likely to lessen the decline. Furthermore, there may be other responses that would assist the organization in adapting to declining linkages. In the preceding section, we noted what some of these organizational responses might be, and what effects these might have. What we did not do is recommend whether organizations should make any of these responses. That depends on the extent to which organizations see a decline in manager-orientation linkages as a problem and, of course, where such "problems" fit into organizational priorities, as the year 2000 approaches.

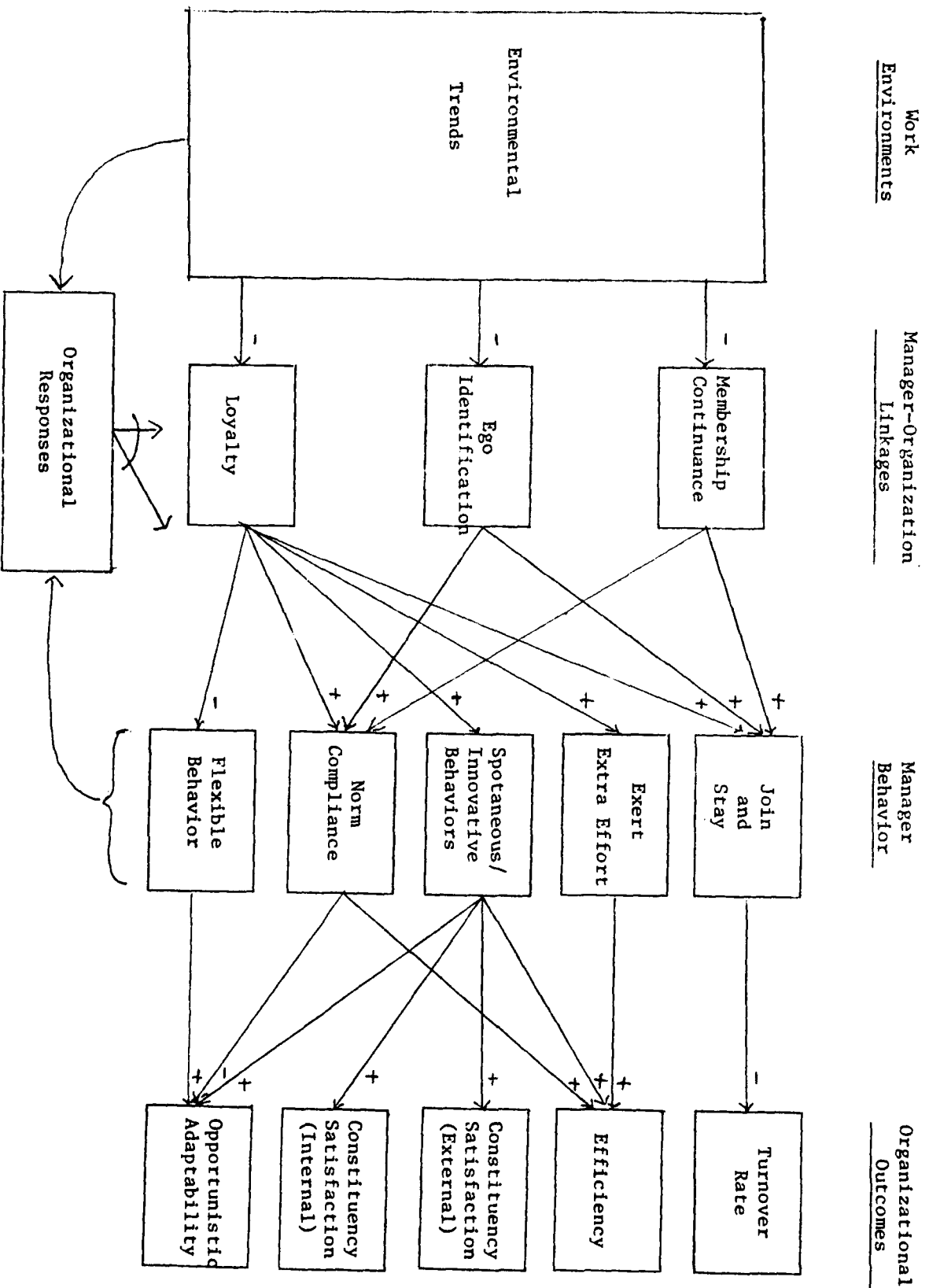


Figure 1: The impact of changing work environments on manager behavior and organizational outcomes through attenuation of manager-organization linkages.

References

- Adams, J. S. (1965). 'Inequity in social exchange', in Advances in Experimental Social Psychology, Volume 2 (E. L. Berkowitz), pp. 267-299, Academic Press, New York.
- Allport, F. H. (1933), Theories of Perception and the Concept of Structure, Wiley, New York.
- Barnard, C. I. (1938). The Functions of the Executive, Harvard University Press, Cambridge, MA.
- Barrett, G. V. (1972). 'Symposium. Research models of the future for industrial and organizational psychology. 1. Introduction', Personnel Psychology, 25, 1-17,
- Beckhard, R. (1977). 'Managerial careers in transition: Dilemmas and directions', in Organizational Careers: Some New Perspectives (Ed. J. VanMaanen), pp. 149-160, Wiley, New York.
- Bennis, W. G. (1966). Changing Organizations, McGraw-Hill, New York.
- Bennis, W. G., and Slater, P. E. (1968). The Temporary Society, Harper & Row, New York.
- Blau, P. M. (1970). 'A formal theory of differentiation in organizations', American Sociological Review, 35, 201-218,
- Bolles, R. N. (1972). What Color is Your Parachute?, Revised, Ten Speed Press, Berkeley, CA.
- Buchanan, B., II (1974). 'Government managers, business executives and organizational commitment', Public Administration Review, July-August, 339-347.
- Etzioni, A. (1975). A Comparative Analysis of Complex Organizations (Revised), Free Press, New York.

- Festinger, L. (1954). 'A theory of social comparison processes', Human Relations, 7, 117-140.
- Gouldner, A. W. (1957). 'Cosmopolitans and locals: Toward an analysis of latent social roles - I', Administrative Science Quarterly, 2, 281-306.
- Hall, D. T. (1976). Careers in Organizations, Goodyear, Santa Monica, CA.
- Hall, F. S., and Hall, D. T. (1978). 'Dual careers - How do couples and companies cope with the problems?', Organizational Dynamics, Spring, 57-77.
- Hall, D. T., and Schneider, B. (1972). 'Correlates of organizational identification as a function of career and organizational type', Administrative Science Quarterly, 17, 340-350.
- Ingham, G. K. (1970). Size of Industrial Organization and Worker Behaviour, Cambridge University Press, London.
- Johnson, R. T., and Ouchi, W. G. (1974) 'Made in America (under Japanese management)', Harvard Business Review, September-October, 61-69.
- Katz, D. (1964). 'The motivational basis of organizational behavior', Behavioral Science, 9, 131-146.
- Katz, D., and Kahn, R. L. (1978). The Social Psychology of Organizations, Second Edition, Wiley, New York.
- Levinson, H. (1965). 'Reciprocation: The relationship between man and organization', Administrative Science Quarterly, 9, 370-390.
- Levinson, H., Price, C. R., Munden, K. J., Mandl, H. J., and Solley, C. M. (1962). Men, Management, and Mental Health, Harvard University Press, Cambridge, MA.

- Lewin, K. (1935). 'Environmental forces in child behavior and development',
in K. Lewin, A Dynamic Theory of Personality: Selected Papers
(Translated by D. K. Adams and E. K. Zener) McGraw-Hill, New York.
- March, J. G. and Simon, H. A. (1958). Organizations, Wiley, New York.
- Mayntz, R. (1970). 'Role distance, role identification, and amoral behavior',
Archives Europeenes de Sociologie, 11, 368-378.
- Patchen, M. (1970). Participation, Achievement and Involvement on the Job,
Prentice-Hall, Englewood Cliffs, N.J.
- Perry, J. L., Angle, H. L., and Pittel, M. E. (1979). The Impact of Labor-
Management Relations on Productivity and Efficiency in Urban Mass
Transit, Final Report, U. S. Department of Transportation, Research
and Special Programs Administration, Washington, D.C.
- Porter, L. W., and Dubin, R. (1975). The Organization and the Person, Final
Project Report, (NR 151-315), U.S. Office of Naval Research,
Arlington, VA.
- Porter, L. W., Lawler, E. E., III, and Hackman, J. R. (1975). Behavior in
Organizations, McGraw-Hill, New York.
- Porter, L. W., Steers, R. M., Mowday, R. T., and Boulian, P. V. (1974).
'Organizational commitment, job satisfaction, and turnover among
psychiatric technicians', Journal of Applied Psychology, 59,
603-609.
- Quinn, R. P., and Staines, G. L. (1979). The 1977 Quality of Employment Survey,
Institute for Social Research, Ann Arbor, MI.
- Ritzer, G. (1977). Working: Conflict and Change, Second Edition, Prentice-Hall,
Englewood Cliffs, NJ.

- Schein, E. H. (1978). Career Dynamics; Matching Individual and Organizational Needs, Addison-Wesley, Reading, MA.
- Selznick, P. (1957). Leadership in Administration, Row, Peterson, New York.
- Thibaut, J. W., and Kelley, H. H. (1959). The Social Psychology of Groups, Wiley, New York.
- Thompson, J. D. (1962). 'Common and uncommon elements in administration', Social Welfare Forum, pp. 181-201.
- Thornton, R. (1970). 'Organizational involvement and commitment to organization and profession', Administrative Science Quarterly, 15, 417-426.
- VanMaanen, J. (1975). 'Police socialization: A longitudinal examination of job attitudes in an urban police department', Administrative Science Quarterly, 20, 207-228.
- Walters, K. D. (1977). 'Corporate social responsibility and political ideology', California Management Review, 19 (Spring), 40-51.

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